(FILE 'HOME' ENTERED AT 13:43:28 ON 06 APR 2003)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 13:43:45 ON 06 APR 2003

L1 116 S PHOSPHORYCHOLINE?
L2 3 S L1 AND (C REACTIVE)

=>

LVCook
4/6/03

(FILE 'HOME' ENTERED AT 13:43:28 ON 06 APR 2003)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 13:43:45 ON 06 APR 2003

L1 116 S PHOSPHORYCHOLINE?
L2 3 S L1 AND (C REACTIVE)

=>

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN 1973:122503 CAPLUS
DN 78:122503
TI Effect of **C-reactive** protein and blood-group substances on tritium-labeled-thymidine incorporation into DNA of leukocytes
AU Hokama, Y.; Paik, Y. P.; Yanagihara, E.; Kimura, L.
CS Sch. Med., Univ. Hawaii, Honolulu, HI, USA
SO RES: Journal of the Reticuloendothelial Society (1964-1973) (1973), 13(2), 111-21
CODEN: RESJAS; ISSN: 0033-6890
DT Journal
LA English
CC 15-13 (Immunochemistry)
AB The incorporation of thymidine-3H by leukocytes decreased in the presence of **C-reactive** protein and the effect could be reversed in the presence of **phosphorycholine**. It was suggested that decreased incorporation was due to the binding of **C-reactive** protein to the leukocyte surface.
ST **C reactive** protein leukocyte; thymidine leukocyte DNA; phosphorylcholine thymidine leukocyte
IT Proteins
RL: BIOL (Biological study)
(**C-reactive**, DNA formation inhibition by, in leukocyte)
IT Leukocyte
(DNA formation by, **C-reactive** protein effect on)
IT Deoxyribonucleic acids
RL: BIOL (Biological study)
(formation inhibition of, by **C-reactive** proteins, in leukocyte)

=>

2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN 1990:114222 CAPLUS
DN 112:114222
TI Binding specificity of human **C-reactive** protein by using affinity chromatography
AU Kishida, Takuya; Kuwajima, Shirou; Noda, Tadafumi; Izumi, Yoshihito; Naka, Keiichi; Matsui, Tadashi; Okuda, Kiyoshi
CS Med. Sch., Osaka City Univ., Osaka, Japan
SO Ensho (1989), 9(5), 369-74
CODEN: ENSHEE; ISSN: 0389-4290
DT Journal; General Review
LA Japanese
CC 6-0 (General Biochemistry)
AB A review with 39 refs. Clin. and biol. aspects, esp. immunol. ones, of human **C-reactive** protein (CRP) were studied. Some of them were ascribed to its capacity of ligand-binding with **phosphorycholine** (PC) Ca-dependently. While type 4 pneumococcal polysaccharide, which lacks phosphate and choline, has been pointed out to be able to bind human CRP in Ca-dependent manner, ligands other than PC should be considered. Specific affinity chromatog. with neg.-charged aminocaproic acid binds human CRP Ca-dependently, being almost comparable to PC-affinity chromatog. In addn., another specific ligand of pos.-charged aminohexyl-agarose binds human CRP Ca-independently. These new ligands may provide simple models for understanding human CRP .
ST **C reactive** protein ligand binding review
IT Molecular association
(of **C-reactive** proteins of human with ligands, specificity of)
IT Proteins, specific or class
RL: BIOL (Biological study)
(**C-reactive**, aminocaproate and aminohexyl-agarose interaction with, of human)
IT 1319-82-0, Aminocaproic acid 58856-73-8
RL: PROC (Process)
(**C-reactive** protein of human binding of)

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

L2 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1992:49588 BIOSIS
DN BA93:29563
TI ISOLATION OF A PHOSPHORYLCHOLINE-BINDING PROTEIN FROM THE HEMOLYMPH OF THE SNAIL ACHATINA-FULICA.
AU MANDAL C; BISWAS M; NAGPURKAR A; MOOKERJEA S
CS DEP. VET., MICROBIOL. PARASITOL., TEX. A AND M UNIV., COLLEGE STATION, TEX. 77843-4467.
SO DEV COMP IMMUNOL, (1991) 15 (4), 227-240.
CODEN: DCIMDQ. ISSN: 0145-305X.
FS BA; OLD
LA English
AB A phosphorylcholine-binding protein from the hemolymph of the snail Achatina fulica was purified to near homogeneity using a Sepharose phenylphosphorylcholine affinity column. The protein bound to the affinity column was eluted with 5 mM phosphorylcholine as a single symmetrical peak. The purified protein (400 Kda) contained 35-40% carbohydrate. On SDS-PAGE the protein separated into two bands of 20 and 24 Kda, and had a pI of 5.9. On immunodiffusion, antiserum to the snail phosphorylcholine binding protein did not cross-react against other phosphorylcholine binding proteins, like rat serum phosphorylcholine-binding protein (PCBP), Limulus **C-reactive** protein (CRP), or human CRP. On pretreatment of the snail hemolymph with this antiserum, the hemagglutination titer of the hemolymph was markedly decreased. The purified snail phosphorylcholine binding protein agglutinated rabbit erythrocytes in the absence of divalent cation (Ca+2) but traceamount of Ca+2 increased its binding. The strongest inhibitor of the agglutination reaction was lactose, followed by melibiose and 2-deoxygalactose. The relationships of the snail **phosphorycholine** binding protein to other hemolymph agglutinins and to CRPs are discussed in light of common phylogeny.
CC Evolution 01500
Cytology and Cytochemistry - Animal 02506
Clinical Biochemistry; General Methods and Applications *10006
Comparative Biochemistry, General 10010
Biochemical Methods - Proteins, Peptides and Amino Acids 10054
Biochemical Methods - Carbohydrates 10058
Biochemical Studies - General 10060
Biochemical Studies - Proteins, Peptides and Amino Acids *10064
Biochemical Studies - Carbohydrates *10068
Biophysics - General Biophysical Techniques 10504
Biophysics - Molecular Properties and Macromolecules *10506
Metabolism - General Metabolism; Metabolic Pathways *13002
Metabolism - Carbohydrates *13004
Metabolism - Proteins, Peptides and Amino Acids *13012
Blood, Blood-Forming Organs and Body Fluids - Blood and Lymph Studies 15002
Blood, Blood-Forming Organs and Body Fluids - Blood Cell Studies *15004
Blood, Blood-Forming Organs and Body Fluids - Other Body Fluids 15010
Immunology and Immunochemistry - Immunohematology, Blood Groups *34506
Immunology and Immunochemistry - Immunopathology, Tissue Immunology *34508
Invertebrata, Comparative and Experimental Morphology, Physiology and Pathology - Mollusca *64026
Invertebrata, Comparative and Experimental Morphology, Physiology and Pathology - Arthropoda - Chelicerata 64060
BC Gastropoda 61200
Merostomata 75404
Leporidae 86040
Hominidae 86215
Muridae 86375
IT Miscellaneous Descriptors
LIMULUS-POLYPHEMUS HUMAN RAT RABBIT ERYTHROCYTE AGGLUTINATION METHOD

L2 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1992:49588 BIOSIS
DN BA93:29563
TI ISOLATION OF A PHOSPHORYLCHOLINE-BINDING PROTEIN FROM THE HEMOLYMPH OF THE SNAIL ACHATINA-FULICA.
AU MANDAL C; BISWAS M; NAGPURKAR A; MOOKERJEA S
CS DEP. VET., MICROBIOL. PARASITOL., TEX. A AND M UNIV., COLLEGE STATION, TEX. 77843-4467.
SO DEV COMP IMMUNOL, (1991) 15 (4), 227-240.
CODEN: DCIMDQ. ISSN: 0145-305X.
FS BA; OLD
LA English
AB A phosphorylcholine-binding protein from the hemolymph of the snail Achatina fulica was purified to near homogeneity using a Sepharose phenylphosphorylcholine affinity column. The protein bound to the affinity column was eluted with 5 mM phosphorylcholine as a single symmetrical peak. The purified protein (400 Kda) contained 35-40% carbohydrate. On SDS-PAGE the protein separated into two bands of 20 and 24 Kda, and had a pI of 5.9. On immunodiffusion, antiserum to the snail phosphorylcholine binding protein did not cross-react against other phosphorylcholine binding proteins, like rat serum phosphorylcholine-binding protein (PCBP), Limulus **C-reactive** protein (CRP), or human CRP. On pretreatment of the snail hemolymph with this antiserum, the hemagglutination titer of the hemolymph was markedly decreased. The purified snail phosphorylcholine binding protein agglutinated rabbit erythrocytes in the absence of divalent cation (Ca+2) but traceamount of Ca+2 increased its binding. The strongest inhibitor of the agglutination reaction was lactose, followed by melibiose and 2-deoxygalactose. The relationships of the snail **phosphorycholine** binding protein to other hemolymph agglutinins and to CRPs are discussed in light of common phylogeny.
CC Evolution 01500
Cytology and Cytochemistry - Animal 02506
Clinical Biochemistry; General Methods and Applications *10006
Comparative Biochemistry, General 10010
Biochemical Methods - Proteins, Peptides and Amino Acids 10054
Biochemical Methods - Carbohydrates 10058
Biochemical Studies - General 10060
Biochemical Studies - Proteins, Peptides and Amino Acids *10064
Biochemical Studies - Carbohydrates *10068
Biophysics - General Biophysical Techniques 10504
Biophysics - Molecular Properties and Macromolecules *10506
Metabolism - General Metabolism; Metabolic Pathways *13002
Metabolism - Carbohydrates *13004
Metabolism - Proteins, Peptides and Amino Acids *13012
Blood, Blood-Forming Organs and Body Fluids - Blood and Lymph Studies 15002
Blood, Blood-Forming Organs and Body Fluids - Blood Cell Studies *15004
Blood, Blood-Forming Organs and Body Fluids - Other Body Fluids 15010
Immunology and Immunochemistry - Immunohematology, Blood Groups *34506
Immunology and Immunochemistry - Immunopathology, Tissue Immunology *34508
Invertebrata, Comparative and Experimental Morphology, Physiology and Pathology - Mollusca *64026
Invertebrata, Comparative and Experimental Morphology, Physiology and Pathology - Arthropoda - Chelicerata 64060
BC Gastropoda 61200
Merostomata 75404
Leporidae 86040
Hominidae 86215
Muridae 86375
IT Miscellaneous Descriptors
LIMULUS-POLYPHEMUS HUMAN RAT RABBIT ERYTHROCYTE AGGLUTINATION METHOD